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WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

SEP 1 1928

REPORT FOR WEEK ENDING SEPTEMBER 1, 1928.

HAVRE:

The past week was cool with showers amounting to .67 inch, thus delaying threshing operations until Friday noon. Threshing is complete on the rotations and miscellaneous small grains. The average yield of spring wheat on the rotations was 30.2 bushels, with a minimum of 13.0 bushels on MCB fall plowing and a maximum of 49.5 bushels on rotation 72 manured fallow. The highest yield of oats and winter wheat was also on manured fallow.

Although the weather during the past ten days has been cool, corn has progressed very satisfactorily. The earliest ears are getting hard while the latest are well past the roasting ear stage. With two more weeks without frost yields of corn should be very good.

More recent reports from the cold weather of last week show that frost was reported from eleven of the northern counties. Corn and vegatables were injured in the mountain section south to within ten miles of the station as well as a great deal of the plains section both west and east. Some of the small grains in these frost localities will undoubtedly be injured.

Maximum temperature 81; minimum 40; precipitation .67 inch.

JUDITH BASIN:

Cool rains during the first three days of the week delayed harvesting and threshing operations over Central Montana.

Newly threshed grain was cleaned and samples taken. Winter wheat was treated for seeding. Tillage method blocks and increase plots were seeded with various type drills.

Threshing continued during the last two days of the week with good yields being obtained on pure seed fields of oats and barley. Combines are again busy threshing. Winter wheat seeding is being done under ideal seed bed conditions.

Maximum temperature 76; minimum 41; precipitation .60 inch.

SHERIDAN:

Threshing has been in progress throughout the week with the exception of the 27th, when the grain was wet from rains of the day before, and the morning of the 31st, when it was necessary to pick seed corn from the rotations and cut some corn plots. Threshing of all small grains and flax in the rotations was completed, as well as the variety plots of the varieties used in the rotations and the most of the rates and dates-of-seeding oats.

SHERIDAN, continued:

Yields of individual plots in the rotations ranged from 9.4 bushels of oats to the acre, where stubbled in the second time in succession after plowing, to 115.9 on MCC, fallow; with spring wheat from 15.8 bushels to the acre on MCF to 48.0 bushels in Rotation II--5, fallow; and with barley from 28.8 bushels on MCF to 67.9 on MCC. Yields of flax have not yet been calculated, it being necessary to clean the grain in order to secure the plot weights. Contrasts between all tillage methods was greater than usual. Threshing has been slow because of the large amount of straw to be handled and the tangled condition of the straw on the wheat and oats where these crops were lodged when cut.

Maximum temperature 81; minimum 34; precipitation .12 inch.

MANDAN:

Agronomy

Threshing was delayed two and a half days the fore part of the week, because of rain. It was completed on the rotations August 31. A 15-acre field of oats for feed remains to be threshed.

Wheat in the Main Field averaged 22 bushels per acre. On fallow the average yield was 22.5 bushels, and on disked corn ground 25.5 bushels. The highest yield obtained was 38.7 bushels on fallow in the South Field. Thistles were very thick on all fallow plots, and no doubt reduced the yields. The grain was not of the highest quality. Some of the grain was shrunken and the weight per bushel ran from 54 to 59 pounds.

Barley in the Main Field averaged about 27 bushels per acre. The highest yield of 38 bushels per acre, was on fallow.

Oats in the Main Field averaged 60 bushels per acre, with 67 bushels per acre on disked corn ground and 72 bushels per acre on fallow. The highest yield was 97.2 bushels on manured fallow. The lowest was 16 bushels on continuous listing.

Corn is making progress toward maturity. The weather has been very cool for this time of year. A few warm days are needed. Frost has threatened during the week.

The second cutting of alfalfa along the coulee is being hauled in today. The yield will be very good for the second crop.

MANDAN, continued:

Agronomy, continued.

The total rainfall for August was 2.24 inches, or about .40 inch above normal. The total for the year to date is 15.54 inches, which is two inches above normal.

Maximum temperature 77; minimum 40; precipitation .24 inch.

Cooperative Grazing Experiment

Grass in the native pastures still remains in good condition for grazing. It is much greener than usual for this time of the year. Brome grass is still in good condition for grazing, but sweet clover has matured and is drying up.

The cattle made gains above the average for August. The following gains were made during August and for the season to date.

Pasture (Acres)	No. of Steers	Gains in pounds per head	
		August	105 days
100	10	75.0	257.0
70	10	78.0	263.0
50	10	89.0	246.5
30	10	74.0	202.5
Rotation (70)	14	55.4	206.4
Brome grass (25)	8	88.1	261.3
Sweet clover (10)	5	87.0	297.0
Reserve *	6	47.5	.....

* On the sweet clover pasture during August. Gain less than those on the sweet clover for the full season.

The 50 and 30-acre steers grazed practically pure Blue grama grass during the month. This grass was in excellent condition for grazing.

Arboriculture

Shelterbelt inspection is now practically complete for this year. Mr. Matthew finished on August 30; Mr. Emerson on August 31; Mr. George is expected in the first of next week.

The seed crop of both ash and box elder appears to be good, so that a reserve supply can probably be collected.

MANDAN, continued:

Arboriculture, continued.

Visitors of the week included Dr. Harry V. Harlan, and Mary L. Martini, Barley Investigations.

AKRON:

The past week has witnessed showers about the countryside but none has fallen at the station to relieve the long continued drought.

August passed with a total of .25 of an inch of precipitation made up of two inconsequential showers. This is the lowest rainfall recorded in August during the 21 years that records have been kept. The next lowest August rainfall was in the year 1919 when .44 of an inch was recorded. This makes the fifth August within 21 years to pass with a rainfall of less than one inch.

Work consisted of odd jobs about the station, there being many such jobs following a steady siege of harvesting and threshing the small grain crop.

The first date and rate seeding of winter wheat on fallow emerged promptly but has not to date emerged on cornland. The second rate and date seeding was made today, September 1.

The rotation corn plots are being harvested today, about 10 days earlier than the average date. The blades were drying up and there was danger of losing the forage unless harvested.

Compass cherries and the Hansen Hybrid plums were harvested during the week. The first appreciable crop of plums was harvested off the Waneta variety. It truly appears to be the peer of the Hansen Hybrids.
Maximum temperature 95; minimum 48; precipitation Trace.

NORTH PLATTE:

August passed as practically a rainless month. No measurable rain fell on the table. Three light showers on the bench totaled .08 inch.

Later reports indicate that killing frost occurred over extended areas in western Nebraska on August 23 when a temperature of 34 degrees was recorded at the station. The greatest damage was done in depressions over the table lands. The valley lands practically all escaped. The chief injury was to corn, which in many cases was only in roasting ear stage.

NORTH PLATTE, continued:

The third cutting of alfalfa was put up during the week. Where it is possible to do so, fields are being irrigated in an attempt to produce a fourth cutting.

COLBY:

This week saw the completion of the threshing on the station. Threshing was the order of the day, each day except Sunday, from August 9 to August 30, inclusive. Grain was just dry enough to thresh on August 9, due to previous rains. The threshing was continued on the dates given without interruption from even a sprinkle. Showers, that would have prevented threshing, have occurred on each of the two days since the threshing was completed. The last two days of the week were devoted to cleaning plot wheat and to plowing, levelling lister furrows, and miscellaneous field work that has been put off during threshing.

The corn has continued to dry even though the weather has not been unusually severe. The fall plowed plots continued to show drying until the whole plot shows a whitish or premature ripening. The corn on these plots was barely past the roasting ear stage when drying started. The spring plowed corn plots are also showing now almost as much drying as the fall plowed plots. The listed corn on the station, both plots and field, while showing drying, are not severely injured yet. Good general rains have fallen north and east of the station but none has fallen on the station that would help anything.

A few are seeding wheat in this vicinity. In general, wheat seeding has not started generally due to the dry surface soil. Land that was cropped to wheat this year hasn't sufficient moisture to till satisfactorily. A few have burned off the stubble which was rather rank. Very little volunteer wheat has started. Probably the biggest single tillage tool that has been used this fall has been the one-way disk plow. One dealer reported to the writer ten days ago that he had sold 51 of these implements this fall at that time. The other principal tillage has been double disking and listing. A large percent of the stubble fields have not been touched.

A few straggling weeds on fallow plots and fields were hoed during the week. The fallow plots are in very good condition this fall. A few more days of weed killing remains to be done.

Precipitation for August 1928 was 1.19 inches; total for first 8 months of 1928, 16.68 inches. Forty-one year average precipitation for August 2.32 inches, for first 8 months 14.28 inches. Evaporation, August 1928, 8.770 inches, 15-year average, 7.804 inches.

Maximum temperature 94; minimum 42; precipitation 0.20 inch. Evaporation 1.873 inches; wind velocity 6.7 miles.

HAYS:

There is nothing new to report for the week, except rather wide extremes in temperature ranging from 47 to 98 degrees. It remains dry, there having been but one shower only large enough to lay the dust.

Corn is maturing very well, somewhat better than normal and the grain sorghums are filling well, the earliest varieties beginning to mature. On the Dry Land Project medium date maturing varieties are used and these will require several days yet to mature.

Soil sampling, counting of stands of corn, kafir and milo, and some tillage work has been the line of work during the week, also a continuation of ditch work at odd times.

TUCUMCARI.

A much needed rain of 0.91 inch last night will greatly aid late row crops, but came too late to prove of much benefit to corn and the early sorghums. This precipitation makes the total received since last October 1, 11.87 inches, compared with a 23-year average of 15.85 inches for this 11-month period.

Soil moisture samples on M. C. milo plots early in the week showed the first foot contained from 3.5 percent to 5.0 percent on cropped plots and 10 percent on fallow. Crop plots averaged, for the six feet, from 6.2 percent to 7.4 percent, while fallow average was 10.2 percent. Last fall was exceptionally dry and it has been apparent all season that the fall plowed plots in all M. C. series were suffering more severely than the spring plowed plots in the same series. Listed M. C. plots are later than surface plowed plots and have not suffered to same extent as the latter.

Corn has suffered more from drought than any other crop, while peanuts and cotton have shown least effect. Milo is ripening and may be aided to some extent by the recent rain, but will not respond so much as kafir, which is considerably later. Average grain yields of both milo and kafir in the rotation and M. C. plots are probable, but fodder will be unusually low, since all vegetative growth is very short.

Work the past week has included completion of grape picking, a large amount of plant and stalk counting, roguing plots and increase, harvesting and picking of a number of cowpea variety and rotation plots, plowing of Sudan and cowpeas for green manure, hilling of peanuts, cutting Sudan increase, and hauling surface material to roadways around station buildings.

TUCUMCARI, continued:

Messrs. Chilcott of Woodward, Clemmer of Dalhart, and Horton of Wichita, visited the station early in the week.

Maximum temperature 94; minimum 56; precipitation 1.05 inches. Wind velocity 5.9 miles per hour.

LAWTON:

Hot winds prevailed the first four days of the week with maximum temperatures ranging from 96 to 102. A shower of 0.22 inch on the 30th, and cloudy to partly cloudy skies reduced the temperatures to 86 and 84, with a minimum temperature of 61 on the 31st.

About 80 plots of grain sorghums and 3 plots of forage sorghums were threshed, cleaned and weighed. About 35 or 40 plots were headed and all of the remaining feterita and kafir on rotation plots in Field A were cut and shocked. Grain sorghum yields obtained so far from the April 15 planting are running from 23.3 bushels to 56.8 bushels per acre.

Seed from a few selection of soybeans were picked and cleaned. Only a few of the 70 varieties grown will make an appreciable production of seed.

Cotton has opened rapidly during the hot, dry days of the past two weeks and some picking will have to be done within a short time. Moisture is badly needed to properly mature the early bolls and would also also be of extraordinary benefit to late planted cotton. The first bale of cotton in the county was ginned August 25. The bale was picked on creek bottom land about a mile east of the station.

Mr. J. R. Horton, Entomologist, of Wichita, Kansas, was a station visitor August 31.

Total precipitation for August 1.21 inches; deficiency for the month 1.87 inches.

SEP 5 1928

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SEP 5 1928

REPORT FOR WEEK ENDING SEPTEMBER 8, 1928.

HAVRE:

With favorable climatic conditions, threshing has continued during the week. With the exception of some alfalfa and flax, all of the plot threshing is completed. Corn progresses very satisfactorily with indications now for very good yields of grain.

Combining in this section of the State is progressing very rapidly.

Mr. A. L. White, recently appointed county agent for Glacier and Toole Counties, was a visitor at the station on the 7th and 8th.

Maximum temperature 85; minimum 38; precipitation Trace.

JUDITH BASIN:

No rain was recorded during the past week. Clear days with moderate temperatures have hastened the maturing of all crops.

Spring wheat on the rotation plots was threshed and returned distinctive differences in favor of fallow and disked corn ground.

Pure seed plots of the various crops were threshed. Winter wheat yielded 27 bushels, spring wheat 40 bushels, barley 60 bushels and oats 70 bushels per acre. Fields of barley on plowed fallow compared to duckfoot fallow are being threshed today with yields practically equal.

Visitors included Mr. L. D. Kurtz, Extension Agronomist, Dr. H. Welch, Station Veterinarian, Commissioners Quickendon, and Cooper.

Maximum temperature 86; minimum 34; precipitation 0.

HUNTLEY:

Warm weather during most of the week has hastened the maturity of beans, corn and sorgos to the point where these crops will soon be ready to harvest. The uneven ripening of beans throughout this locality has caused much concern among farmers who are faced with the problem of harvesting a small crop of mature beans now, or taking a chance on a late frost and postponing harvesting operations until larger percentage of the beans in their fields have ripened.

HUNTLEY, continued:

Corn has hardened up fairly well and a small supply of seed has been picked during the last few days. Yields of corn on the plots will be much heavier than expected, but the quality will be low, as the stover is generally short and dry and the ears are little better than "nubbins", but there are a lot of them.

Maximum temperature 93; minimum 45; precipitation 0.

SHERIDAN:

The remainder of the rates and dates-of-seeding oats, the wheat from the check plots of the rotation field, and all Marquis wheat on the station (rates, dates, and variety), were threshed during the week. There still remains to be threshed the dates-of-seeding Ceres and Kubanka wheat, the varieties of small grain, and fields of barley raised for feed. More seed corn was picked from the rotation plots, and the remainder of the corn in the rotations harvested with the exception of the MC Series and five other plots which still remain in fairly good condition. Some of the corn varieties also were cut, also the solid seedings of Sudan grass and sorgo.

Maximum temperature 94; minimum 41; precipitation 0.

MANDAN:

Agronomy

The past week has been favorable for all field work. Oats in field P was threshed. The 15 acres averaged 57 bushels per acre. Seed corn was picked. The yield will be very good again this year.

A 35- acre block of Payne white dent corn in the south field is being cut today. Part of this will be put in the silo.

Maximum temperature 90;minimum 35; precipitation 0.

Cooperative Grazing Experiment

The cattle on sweet clover will need to be moved soon, as the sweet clover has matured, and very little of it is being grazed at present.

MANDAN, continued:

Cooperative Grazing Experiment, continued.

The steers in the brome grass pasture will also soon be out of feed. The 30-acre steers are still on their pasture and seem to be doing well.

Horticulture

The majority of fruit varieties have now been picked. While the yield in general was not very large, a number of valuable notes on the newest varieties, as to date of ripening, quality, and general growth habits of the respective trees, have been secured.

The Waneta plum has again out-yielded any other Japanese plum hybrids on the station, and while not of as high quality as the best, must be conceded to be a very good variety for this region.

For the first time we have had a crop of Wealthy apples on the station. The fruit, while rather impaired by the effects of blight, was on the whole of good size and quality.

A number of very promising selections of crabs and apples from Wealthy seedlings have been made during the last 4 years. All are fruiting this year, and some look to be decided improvements on older varieties adapted for this region.

The work with vegetables during the past week has been mostly, pulling and stacking of navy beans, final hilling up of celery, harvesting of various vegetables as they became ready, and completion of making selections in the tomato breeding project.

The lawns on the station are now showing signs of distress, and unless rain comes within the near future, irrigation will be necessary. The flower beds are still in prime condition. All are a blaze of crimson, pink, yellow, and vermillion.

Arboriculture

Mr. George returned on Monday, September 2, after completing shelterbelt inspections in Montana and western North Dakota. He reports young trees being badly stripped by grasshoppers particularly in western North Dakota.

MANDAN, continued:

Arboriculture, continued.

Of the 361 applications received for shelterbelt plantings in 1929, 90 are postponed until 1930 on account of the land on which the trees are to be planted not being in suitable condition, and 33 are entirely cancelled. Notices of acceptance, postponement and cancellation, have been mailed to all these applicants.

Of the 110 10-year old plantings visited, 11 have been cancelled, and of the 142 5-year old plantings, 17. These cancellations are due in almost every instance to the farm having been abandoned, or a renter on the place who is not interested in trees.

Mr. F. E. Cobb, President, State School of Forestry, Bottineau, North Dakota, is a visitor over the week end.

ARDMORE:

The weather during the week was hot and dry. A severe wind storm on Friday night caused some damage by blowing down corn and sorgo shocks.

The fall plowing of the rotation plats was started on August 27 and all fall plowed small grain plats finished on September 5. The fall plowing of fields was finished September 8.

Harvesting of corn and sorgo was begun on September 5. The sorgo plats in field 5, all corn in the field rotations and about one half of the corn plats in the main rotations were harvested.

The experiment with pigs on self-feeder was finished on the 2nd. The pigs were shipped to Omaha on the 4th, and sold to the packers at $12.50 per cwt. The average gain per head during the experiment, a period of 86 days, was 134 pounds or 1.55 pounds per day per head.

Maximum temperature 94; minimum 38, precipitation Trace.

ARCHER:

The weather during the week has continued dry with moderate temperatures the first half, and rather high temperatures the last half.

ARCHER, continued:

Work at the station has consisted of hauling millet hay, seeding winter cereals and duckfooting the weed Franseria Tomentosa. The last of the harvesting of small cereals is in progress and will be finished today.

Grasshoppers are numerous this fall. The first date of seeding winter wheat on fallow, August 15, emerged with a good stand but has been eaten off by this pest. Preparations are being made to poison them.

The corn and sunflowers are ready for the silo. Preparations are in progress for this work.

Maximum temperature 87; minimum 41; precipitation .04 inch.

AKRON:

Weather remains dry in the immediate vicinity of the station. Local showers have been prevalent over the sountryside during the past two weeks. In a strip from about 18 to 30 miles south of Akron corn prospects were noted Saturday as optimum. With the row crops green and promising and with frequent ricks of unthreshed grain dotted over the landscape, this region looked especially prosperous. However in a meeting of the Grange that night at Aurora the general concensus was that the Plains of Colorado are dry and that one of the most promising corn prospects within recent years has been blighted.

The second date and rate seeding of winter wheat was made promptly on the first. The harvesting of the corn, the millet, and the early seeded beans was started early in the week. All corn plots with the exception of those on corn land and the thin spacing on the rate and spacing corn project were harvested at that time. The fanning and grading of grain for sale for seed and for seeding purposes on the station has held attention all week.

The pigs were given their regular weighing Friday. The self fed dry lot now averages about 140 pounds each. The pasture lot was placed on self feeder this week end, they having consumed all of the available Sudan pasture.

Dr. John H. Martin visited the station Friday. Mr. Osland, from the Agricultural College, was also here Friday in the interest of the live stock experiments.

Maximum temperature 93; minimum 47; precipitation Trace.

COLBY:

With the exception of the last day of this week the weather was not expecially unfavorable for corn and sorghums. Saturday was a very drying day with a hot, high wind from the South. Saturday was either the most drying day of the year or very close to it. Surface planted corn has dried up very much and this variety of corn will be cut the first of this coming week. Milo is just forming seed.

A commercial field of corn was seeded to wheat the first half of the week. It is not felt that it will emerge to a stand before it rains.

The local fair interfered with some needed field work during the week.

Maximum temperature 96; minimum 41; precipitation .08 inch. Evaporation 1.504 inches. Average wind velocity 4.7 miles per hour.

GARDEN CITY:

Fall like weather has prevailed throughout most of the past week. The row crops continue to look promising. The only crop on the project showing a need of moisture is some kafir that was drilled for feed. Prospects are good for a high yield of all grain sorghums and corn unless we should have an early frost. Some milo is beginning to show a little maturity, but the most of the sorghums are late. Corn is just past the roasting ear stage.

The station held its annual field day Thursday. The occasion was well attended by farmers. While the crowd was not as large as in previous years the interest taken was very good.

Field day visitors included Messrs. J. W. Zahnley and H. H. Laude, of the Manhattan Station, and L. C. Aicher, R. E. Getty, and A. L. Hallsted of the Hays Station.

Maximum temperature 100; minimum 44; precipiation. 0.

TUCUMCARI:

Cooler weather has characterized the past week, and crops are maturing normally as the result of rain the close of August. Early crops will be rather light in yield, but those planted late enough to take advantage of the recent moisture will make average yields.

TUCUMCARI, continued:

Surfacing station roadways, cutting and cocking cowpeas, pulling and seeding of broomcorn, and hauling cowpeas and Sudan have composed the week's work.

Director Garcia, of the State College, is visiting the station today.

Maximum temperature 92; minimum 53; precipitation .07 inch.
Evaporation 1.302 inches; wind velocity 3.4 miles per hour.
Precipitation since October 1, 11.65 inches.

BIG SPRING:

Warm, dry weather has prevailed during the past week with the result that many of the grain sorghums have started to ripen. Cotton is also starting to open; the April 15 date of planting was picked during the week. The first bale of cotton to be picked in the county was ginned during the past week. Judging from present indications the cotton crop in this county is going to be somewhat disappointing this year. With very few exceptions the farmers have a plant growth capable of producing a half a bale per acre, but the bolls are not there, and there are very few blooms and squares to make bolls.

Station work this week consisted mainly of hauling in cowpea hay from the rotation plots and some of the varieties, cutting variety cowpeas and picking cowpea seed. Leoti and Red Amber sorgos were harvested during the week.

Maximum temperature 91; minimum 62; precipitation 0.

LAWTON:

Moderate temperatures and two showers amounting to .47 inch have been of some benefit to cotton the past week. Deterioration of the crop, however, since the fore part of August has been very rapid and a light yield is rapidly opening. Premature development is producing only a fair staple and weak fiber. Picking is quite general through out the county. Fourteen rotation plots and the April 15 and May 1 plantings of Oklahoma 44 were picked during the week.

Station work has been confined to heading and harvesting of sorghum crops, threshing, cleaning and weighing seed, cotton picking and stripping seed from the soybean varieties.

LAWTON, continued;

The Comanche County Fair is being held at Lawton this week. Exhibits of corn, grain sorghums and vegetables are above the average. Favorable weather conditions have encouraged a heavy attendance.

Station visitors include Messrs. H. N. Vinall, of the Forage Crop Investigations, J. C. Stephens, from Chillicothe, Texas, L. W. Osborn, Extension Agronomist, Stillwater, Oklahoma, E. J. Wilson, and J. Paul Lusk, of the Texas Substation, Iowa Park, Texas.

Maximum temperature 93; minimum 55; precipitation .47 inch.

WOODWARD:

Weather during week has been rather windy and cloudy part of time. Three small showers occurred which brightened things up, but were of no material benefit to crops.

Work for the week consisted of cultivating weeds from wheat plots, picking grapes, preparing for our Field Day, and other odd jobs.

Attendance at the Field Day, today, September 8, was the largest by far that has ever attended any of these events. The crowd was estimated at 3000. The crowd began gathering early and stayed until late afternoon, and showed unusual interest in the various phases of the work and experiments of the Station.

Maximum temperature 94; minimum 51; precipitation .81 inch. Evaporation 1.995 inches; average hourly wind velocity 7.4 miles.

ARDMORE: Week ending September 1.

The weather during the week was warm and dry with cool nights.

Corn matured rapidly and should be ready for harvest the fore part of the coming week.

The sorgo in the variety test showed some damage by drought. Red Amber and Leoti Red Amber are just beginning to head. Some of the heads of Dakota Amber sorgo in the plots and fields are beginning to ripen.

ARDMORE, continued:

The steers in the grazing experiment were weighed on the 29th. The average gain per head made by the steers in the different pastures for the thirty day period are as follows:

150	acre pasture	- - - - - - - - -	33.5 pounds.
80	" "	- - - - - - - - -	6.0 "
160	" rotation pasture	- - - -	30.6 "
320	" reserve pasture	- - - -	93.8 "

In the reserve pasture there are four steers on 320 acres with plenty of water and shade available. This probably accounts for the much larger gains made.

The final weighings of the pigs on self-feeder experiments were started on August 31. The average weight of the sixty pigs was 188.5 pounds.

Maximum temperature 88; minimum 38; precipitation .01 inch.

ARCHER: Week ending September 1.

Up to the first of July the growing season received about the normal amount of precipitation. The first half of July was dry but the last half received a fair amount of precipitation. The total for July was 1.45 inches which is .60 of an inch less than the 15-year average. The total precipitation for August was .72 of an inch which is 1.27 inches less than the 15-year average. The drought continues and it is doubtful if the remaining crops would be benefited by precipitation even though a considerable amount occurred. The maturing period of corn would be prolonged which would in all probability cause it to be frosted.

Work at the station has consisted of hoeing, threshing the barley from the dairy fields, cutting and raking millet in the dairy field and harvesting the common spring wheat varieties. The yield of a 17 acre field of Smyrna was a trifle less than 30 bushels per acre.

Maximum temperature 79; minimum 41; precipitation 0.11 inch.

GARDEN CITY: Week ending September 1.

Fall like weather has prevailed during most of the past week. Low maximum temperatures and fairly low minimum temperatures have been recorded. Rain has threatened on two days, but only one shower measuring .18 of an inch was received.

All crops are maturing or rather growing normally in spite of the fact that no rain has been received since early in the month.

Field work consisted of turning under green manure plots and disking ground that is to be fallowed next season. Soil samples were taken on some dry land plots and on some winter irrigated ones. Soil moisture conditions are still good on both methods sampled.

Maximum temperature 93; minimum 49; precipitation .18 inch.

DALHART: Week ending September 1.

The past week has been reasonably cool, with occasional cloudiness, moderate wind and local rains. The rains have been spotted, only one being recorded at the station which really did some good. Two were recorded during the week, one being very light. The total for the two showers is .74 inch.

Weather has been favorable for field work. Some harvesting was done during the week, including cowpeas millet and Sudan grass. The cowpea varieties were all harvested for hay excepting two, the Brabham and Groit. These will not be ready for another week.

Considerable rogueing was done this week, as well as some hoeing around the tree plantings and ornamentals. The tree plantings and orchard were disked. The blue weed patch in the cow pasture was packed and planted to winter rye, using the deep furrow system of planting for trial as a fall and winter pasture.

The varieties and crops on the rotations are making good headway and looking good. Nothing seems to have suffered for want of moisture. Some of the crops will be ready for early harvest in the near future. All cowpeas on remaining rotations will be ready to harvest the first of the week. The cowpeas on the plots which are to be seeded to winter rye this fall were harvested this week. Plots will be prepared for planting next week.

DALHART, continued:

Station visitors during the week were Messrs. E. F. Chilcott, J. R. Horton and H. Hollingsworth. The two latter are from the Entomology Laboratory of Wichita, Kansas. They were here studying the effect of the range worm, "caterpillar," and the corn borer.

Maximum temperature 92; minimum 56; precipitation .74 inch.

BIG SPRING: Week ending September 1.

Weather conditions have been very favorable for field work practically all of the week. A light shower fell on the afternoon of August 30, but did not delay field work more than a couple of hours.

Cotton is blooming profusely now, and should set a large number of bolls if the insects do not interfere. The usual leaf worm infestation has not started as yet, but a large amount of boll worm damage is being reported. The April 15 date of planting of cotton is beginning to open; this will be ready to pick next week.

An increase field of New Era cowpeas was harvested this week. Sudan grass was reshocked and roadways were dragged. Other work consisted of hoeing out tree rows, cleaning up the grounds, and hoeing peanuts.

Maximum temperature 94; minimum 69; precipitation .19 inch.

WOODWARD: Week ending September 1.

Work of week has consisted of watering shrubs and trees, which otherwise would have died, due to long extended drought, hoeing scattering weeds and picking grapes. Grapes seem to yield about the same year in year out regardless of season. Soil on which they grow is sandy, so rain sinks deeply and they seem as much benefited by rains that come several months ahead as by those that fall during the season. Shipping and storage tests of grapes are being continued this year and samples of juice are being made according to formulas to commercial juice concerns, and will be submitted to them to determine quality of different juices.

Preparations are being made for the Annual Field Day which will be held September 8, despite the drought. Drought has not been broken by rain of over .60 inch since June 25. Crops are apparently benefiting more this year by moisture stored in the soil at planting time than in any previous year.

WOODWARD, continued:

Preparation for wheat seeding is unusually late this year over the Southern Plains. In some places it has been "too wet," immediately around Woodward "too dry."

Maximum temperature 100; minimum temperature 58;
Evaporation 2.018 inches; precipitation .07 inch.
Average hourly wind velocity 7.4 miles.

WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

SEP 15 192

REPORT FOR THE WEEK ENDING SEPTEMBER 15, 1928.

HAVRE:

Threshing operations were checked the first part of the week by a shower of .35 inch on the 10th. With rather dry, windy conditions, the last three days of the week were favorable.

Fall plowing on the rotations is being done. Winter wheat was planted during the week. Sudan grass and sorghums for forage that were cut last week were weighed up. Corn is progressing very nicely and is now well past danger from frost. The yields of corn this year will probably be the best they have been since the station started.

Maximum temperature 77; minimum 38; precipitation .35 inch.

JUDITH BASIN:

With seasonably cool weather and practically no precipitation all late crops advanced toward maturity. Although smow covered the mountains surrounding the basin on the 12th, no frost damage has been reported.

Miscellaneous fields were harvested, and those ready were threshed. Fall plowing and cultivations for seeding were made. Winter wheat and rye were seeded on the rotations.

Most farmers in this section are busy harvesting spring crops and seeding winter wheat. Only a fifty per cent normal acreage of winter wheat will be seeded in the Basin this season due to losses resulting from Foot Rot during the current year. Recommended practises for seedbed preparation and date of seeding are being followed. With a normal season no damage from Foot Rot losses are anticipated.

Professor H. E. Murdock, of the agricultural engineering department at the Montana Experiment Station, visited during the week.

Maximum temperature 75; minimum 34; precipitation .05 inch.

SHERIDAN:

Threshing of all grain from plots is being completed today. The remainder of the corn on the plots, with the exception of late plantings, was cut the 11th. The beans were pulled the same day. Light rain the 13th prevented threshing that day, and the potatoes in Rotation 37 were dug then. The yield of potatoes was light, 61.0 bushels to the acre, but they were of better quality than usual from this rotation. The weather has been alternately cool and quite warm, with the one damp day mentioned. Sorgo and Sudan grass in rows still remain in good condition, with the exception of sorgo in Rotation 58, fall plowed, which was fired badly and was cut the 11th.

Maximum temperature 84; minimum 36; precipitation .08 inch.

DICKINSON:

Unsettled weather with light precipitation on five days prevented threshing until Saturday.

Threshing in the district is only about half finished. About a week's work is left on the station to complete the increase patches of grain and the cereal nursery.

Corn on the rotations was cut September 10 and 11. It had not been injured by frost and was fairly well matured so that better than an average yield of grain will be secured. The fodder yield will be about average since the plants were short. A part of the corn for silage was cut but was not run into the silo.

Winter wheat and rye were seeded on the rotations September 12 and 13 and the winter wheat varieties on the 14th. A few plots were seeded on fallow with the furrow and common drill to compare the two methods again. Last winter the furrow drill plots killed out about as completely as did those seeded with the common drill.

Mr. F. D. Richey, Senior Agronomist, Corn Investigations, U.S.D.A., was a visitor September 11.

Maximum temperature 80; minimum 43; precipitation .36 inch.

MANDAN:

Agronomy

Rain during the week delayed corn harvesting for one day. The small silo was filled early in the week. It was filled with Payne White Dent corn from a 3.5-acre block in the south field. Corn in the main field has been harvested and the south field will be completed today. The corn in the silage block was harvested and weighed green. The yields in tons per acre were as follows: Pride of the North, (a late variety) 11.1; Rainbow, 9.4; Mercer, 6.9; Minn. #13, 6.5; Payne, 6.5; Falconer, 6.5; N. W. Dent, 6.5; Morton Co., 5.4.

Sorgo and Sudan were harvested and the green weights were as follows in tons per acre: Black amber, 14.1; Red amber, 13.7; Freed, 9.7; Dakota amber 8.1; Sudan, 5.9.

A good supply of seed of N. W. Dent and Payne White Dent has been picked and is being dried. All the corn was harvested without frost injury. A light frost hit some of the low spots late in August.

Winter rye was seeded on the 14th, the day following a good rain.

Maximum temperature 75; minimum 42; precipitation .73 inch.

Cooperative Grazing Experiment

The steers were moved from the sweet clover on the 13th. They were out of feed and had lost weight during the past 15 days. The steers in the brome grass pasture were given access to a small reserve of native pasture at the same time. They showed a gain for the 15 days as they still had some brome left in the pasture. The 30-acre pasture is getting short, but it will no doubt carry the cattle to the end of the month.

Arboriculture

Measuring of tree heights in the Specie Testing blocks has been carried on during the week.

A list of "active" shelterbelt cooperators by counties, together with those accepted for planting in the spring of 1929, has been mailed to all county agents.

MANDAN, continued:

Horticulture

So far there has been no frost damage observed on either fruits or vegetables, and the horticultural force is kept busy taking yields of both. The later varieties of plums, such as Emerald, Omaha, Wyant, Desoto, Terry, and a number of Japanese hybrids, are now at their best. All apple and crabapple varieties are also ripe and are being picked.

Vine-crops, such as squash, pumpkin and muskmelon, have about 2/3 of the crop matured, and will be harvested next week.

Celery is ready for table use, and some of it has been dug for use on the station. The flavor is rather strong, but should improve with cooler weather.

Propagation of geraniums, coleus and other tender bedding plants, is being carried on in the greenhouse.

The last of the tomato selections were washed out during the early part of the week. Some cutting out of blight on apples has also been done.

Visitors during the week included Mr. C. N. Ainslie, Entomologist, Sioux City, Iowa, and Mr. F. D. Richey, Corn Investigations, Washington, D. C.

ARDMORE:

The weather during the week was cooler and threatening with intermittent periods of high wind velocity. There was little precipitation.

The harvesting of corn and sorgo fields was finished. In the rotation plots listed corn and sorgo and one plot of corn on fallowed land remain to be harvested. Harvesting corn in the variety test plots was started on September 12. The ears were husked from the standing stalks. The stalks will be cut with a corn binder when the husking is finished.

ARDMORE, continued:

The experiment with pigs on a limited ration of shelled corn supplemented with alfalfa and sorgo pasture was ended on the 14th. The average of three consecutive days' weights for the pigs was about 88 pounds. The pigs were shipped to Manhattan, Kansas where they will be fattened.

Maximum temperature 89; minimum 35; precipitation .12 inch.

ARCHER:

The weather has continued dry with rather high winds. On September 13 the wind was so severe that field work was impossible. The sunflowers suffered severely during this period.

Work at the station has consisted of threshing and the putting up of silage. All small cereals on the Dry-Land plots except flax have been threshed. The silage yield of corn is rather light but there are a relatively large number of well formed ears the grain of which is becoming firm. While there was no frost the heavy wind caused the plants to appear frosted and the corn ripened rapidly.

Winter wheat seeded on fallow is emerging. That seeded on plowed fallow emerged more rapidly than that seeded on duckfoot fallow. It was possible to get the furrow drill into moist soil more easily on plowed fallow than on duckfoot fallow.

Maximum temperature 87; minimum 39; precipitation .02 inch.

AKRON:

Weather remains hot and dry with hard driving winds coming to be the exception rather than the rule. The Otis paper this week reports a hail and rain over a strip a few miles wide about twenty miles south of that town. However, rains appear to be purely local with most areas within reasonable distance dry. The drought is becoming more serious in that it is extending into the normal winter wheat seeding period. It threatens to cause a greatly curtailed winter wheat acreage, or else a great acreage of winter wheat seeded out of season.

AKRON, continued:

A very creditable County Fair passed with the week. Livestock exhibits were fully up to the high standard set by preceding fairs and the agricultural exhibits were only short the corn and the late garden vegetables such as melons, pumpkins and squashes.

Work at the station has consisted of odd jobs in addition to the completion of the harvesting of the rotation and rate and spacing corn plots and the rotation sorgo plots. The fanning and grading of winter wheat to be sold for seed purposes has also held undivided attention. The third rate and date seeding of winter wheat is being made today.

A very hard northwest wind blew all day Thursday, the 13th, but caused little real damage other than to prove very disagreeable to man and beast.

Dr. W. P. Headden, Head of the Chemistry Department, and Mr. Earl Douglass of the same department, visited the station Friday forenoon. Mr. E. L. LeClerg, of the Botany Department, spent part of Friday afternoon at the station seeding a nursery for studying winter wheat diseases. All these men were from the Colorado Agricultural College.

Maximum temperature 94; minimum 42; precipitation .04 inch.

HAYS:

Generally the weather has been warm to hot and dry with two days of rather heavy wind.

Feed crops have been maturing most too rapidly because of the droughty condition, and some lodging is taking place, especially in the heavier growth of sorghums. However, in spite of this fact the yield will be considerable above average. The crops maturing early have made big yields and are not being damaged much by the drought.

Milo on the project is ready to harvest. The listed plots, (C.C.F. and C. C. G.) which had to be replanted, and were later, have suffered severely from chinch bugs and will produce practically no grain. All the other plots of milo will thresh out good yields and the fallow will make a heavy yield.

HAYS, continued:

Kafir is maturing rapidly and will soon be ready for harvest.

Corn was harvested the 10th. This crop has made a yield much better than the average.

Work during the week has included the harvesting of corn plots, and surface tillage to destroy volunteer wheat. The plots to be "late disked," "late plowed," and "late one-wayed" (one-way disk) were worked today. Soil sampling and grasshopper poisoning has also consumed considerable time during the week. Grasshoppers are now more numerous than at any time during the season, and must be killed around the project before a stand of wheat can be secured this fall.

Maximum temperature 99; minimum 50; precipitation Trace.

GARDEN CITY:

The continued dry weather is having its effect on the sorghum crops. Milo on poorly prepared seedbed is firing badly. Lack of moisture seems to be causing a rather rapid maturity of grain, also. If frost is not received earlier than usual, prospects are good for a high yield of all row crops. Milo is just beginning to color a little and kafir is in the soft dough stage.

Field work during the week consisted of cutting a part of the cowpea plots, harvesting the second cutting of Sudan hay, and plowing the late fall plowed ground for winter wheat.

Maximum temperature 94; minimum 46; precipitation 0.

DALHART:

It has been hot and dry here, with plenty of wind during the past week. Moisture conditions are getting on a ragged edge. Crops are showing plenty of signs of burning, some having fired nearly to the top.

The crops have needed rain more the past three weeks than at any other time during the summer, as the heads are filling. This dry weather prevailing over the past three weeks has lowered the prospective yield somewhat, but all bids fair to go above the average.

DALHART, continued:

Some harvesting was done this week among the sorghum varieties. The plots were headed and bound. One plot of broom corn was pulled and seeded and the fodder bound. Seed was selected from a number of varieties, and stored. Cowpea hay was hauled in from all rotations, variety planting and general field and stacked. Unusually good yields were obtained this year on this hay, and it was cured in excellent shape.

Several varieties of grapes were picked during the week. The grapes are making a good show this year. They have attracted the attention of visitors from several states, who have come out here seeking information. The visitors all comment on the excellent flavor the grapes have in this section.

Soil samples were taken this week on the milo plots and on the seed bed preparation plots for winter wheat. The samples show that there is not much moisture below the 2nd foot and very little above.

The temperature dropped 51 degrees the other night. This was accompanied by a heavy wind from the north.

Maximum temperature 94; minimum 43; precipitation 0.

TUCUMCARI:

Although the weather has had an autumnal feel the past week, the maximum nearly every day has been well over 90 degrees. Days have been clear, with no precipitation; wind has been spasmodic and changeable; and mornings have been cool and crisp. Fall seems to have arrived, although a late frost is hoped for.

Ranges are good, although grass is not unusually heavy, but crops have suffered for moisture the past week. Milo is in some cases drying up and lodging, with the aid of occasional high winds, while the majority of other sorghums have fired quite extensively long before maturity. A few open cotton bolls lend strength to the hope something of a crop may be produced. Plants are well loaded and could readily produce one-half bale to the acre if all bolls now formed should mature. No doubt one-fifth bale will be nearer the production obtained.

TUCUMCARI, continued:

Ranchers see nothing but bright prospects, with average calves selling from $40 to $50, November delivery. Yearling heifers are changing hands at from $55 to $60, while other grades of cattle are as high in proportion. Few cattlemen can remember the time, something like five years ago, when cows fell from $80 to $20.

Farmers in this locality have less field for rejoicing than the cattlemen. Wheat was fair; row crops have in many cases burned up, while other localities will make a fair crop. Broomcorn is of fair quality and promises a profitable yield in most cases. A fairly large bean acreage is up to the average. Wheat farmers have at least and at last learned the wisdom of early preparation of land and no doubt this fall wheat will be seeded on better prepared land than last fall; and last fall marked a new era in early, thorough preparation. Seeding is being started in some localities, while the surface soil is too dry for germination in others.

Station work the past week included pulling and seeding of broomcorn, with binding of the stalks; hauling rotation and increase cowpeas and increase Sudan; final preparation for wheat and rye seeding and the seeding of these plots; harvesting of beans, and bagging a fairly large number of broomcorn plants.

Station visitors today included Mr. J. B. Sieglinger, of the Woodward Station, Mr. John Carter Jr., of the State College Department of Agronomy, and Messrs. Large and Pendleton, of the Agricultural Department of the C. R. I. & P. Railroad.

Maximum temperature 94; minimum 48; precipitation 0.
Evaporation 2.362 inches; wind velocity 5.7 miles.
Precipitation since October 1, 11.94 inches.

BIG SPRING:

Dry, hot weather has prevailed during the entire week with the result that many of the grain sorghum plots have ripened prematurely. Cotton is also showing the effects of lack of moisture.

All of the grain sorghums in the rotations are ripening very fast; many of them will be ready to harvest next week. Some of the early maturing varieties of cotton were picked during the week. Other work consisted of duck foot cultivating the fallows, pulling and seeding broomcorn, hauling in cowpea hay and Sudan grass hay.

Maximum temperature 98; minimum 67; precipitation 0.

LAWTON:

Cotton suffered from another week of hot, dry weather. Although picking is quite general throughout the county and the crop is opening rapidly the quantity actually being ginned is relatively small.

The first seeding of winter barley was made September 15 on a dry seed bed. Harvest of sorghum crops was completed the past week, except June and July plantings of Sumac. The first picking of all cotton grown on the station was completed September 14. In most instances one-half of the entire production, and in some instances more than one-half, was obtained from the first picking.

Maximum temperature 99; minimum 54; precipitation 0.19 inch.

WOODWARD:

There has been practically no field work done on the Dry-Land or Cereal projects over the past week. The whole labor force was loaned to the Dairy farm to put up silage. The drought remains practically unbroken since the 25th of June. Despite the continued dry weather better yields will be made on sorghum crops than in many previous years. They are drying up rapidly, however, without fully ripening. Harvesting of Dry-Land kafirs started today and will continue over next week.

Maximum temperature 99; minimum 56; precipitation 0.
Average hourly wind velocity 11.1 miles; evaporation 2.532 inches.

COLBY:

Weather remained dry, for the most part, during the week. A rain of 0.21 inch the evening of the 9th did very little good. Corn continued to dry to maturity and the DLA plots of corn were cut during the week with the exception of the fallow, continuous listed, and the alternate rowed plots.

Kafir and milo on continuous spring plowed and continuous fall plowed are beginning to dry up. The kafir plots will not form much grain as the heads are just at the bloom stage. Grain is well formed on the milo plots. Other plots of milo have the grain well set or nearly so.

COLBY, continued:

Ground that was fall plowed the latter part of August is very rough and cloddy.

Visitors during the week included Dr. John Martin, of the Grain Sorghum Division of the Cereal Office.

Maximum temperature 97; minimum 41; precipitation 0.21 inch.
Evaporation 2.017 inches; Average wind velocity 5.9 miles per hour.

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U. S. DEPARTMENT OF AGRICULTURE

SEP 29 1928

REPORT FOR THE WEEK ENDING SEPTEMBER 22, 1928.

HAVRE:

One shower of .15 inch recorded on the 16th did not interrupt operations during the past week. There has been no frost as yet on the station.

Threshing is entirely completed with the exception of alfalfa seed. Corn is being picked before cutting, moisture samples being taken from each plot. Indications are that yields will be around 40 bushels to the acre.

Winter wheat seeded last week is emerging with pretty fair stands. Fall plowing on the rotations is practically completed.

Favorable weather of the past week has aided farmers in this vicinity a great deal. Combined wheat is being marketed very rapidly. Another week of favorable weather will see most of the wheat harvested.

Maximum temperature 87; minimum 35; precipitation .15 inch.

JUDITH BASIN:

Clear days and cool nights and no precipitation has characterized the past week. Although the temperature has dropped to 34 degrees the past three nights, no serious frost damage has been recorded in the Basin.

All small grains except the date of seeding experiment are threshed. Farmers have practically completed their threshing and have commenced tillage operations for next season.

Corn on the rotations and variety tests is harvested. Hogs have been turned into the corn and barley hogging off blocks. Fall plowing is commencing.

A variety test grown on a neighboring farm was threshed at the station with Supreme wheat, a standard spring variety, returning the highest yield. Reliance and Ceres, two new bearded varieties, outyielded Marquis by a profitable margin.

Maximum temperature 84; minimum 34; precipitation 0.

HUNTLEY:

The weather has been clear throughout the week and field work has been pushed on the dry-land project in order to get as much done as possible before the rush of fall work begins on the other parts of the station.

Fall plowing on the Dry-Land rotations is nearing completion; beans, sorgo and Sudan grass have been harvested; seed corn has been picked and some of the corn plots have been cut. The heavy growth of weeds on the plots since harvest has necessitated considerable hand labor to clear the stubble land in order to do a good job of plowing.

The hogs were removed from the plot of corn in the pasture experiment and taken to the dry lot for finishing. The 15 pigs made practically no gains on the acre of corn during the week required to "hog down" the patch. This result was due primarily to the light yield of corn, and the difficulty experienced in locating the "nubbins".

The first frost of the season occurred during the week and killed the more tender vegetables such as tomatoes, squash and melons. Nearly all other crops were harvested or dried up before the frost.

Maximum temperature 90; minimum 31; precipitation .10 inch.

SHERIDAN:

The week has been occupied principally in threshing the larger fields of barley for feed, and in taking care of the grain already threshed. The first killing frost of the season occurred yesterday, and it was necessary to cut the remainder of the sorgo, Sudan grass, and the late plantings of corn. Corn planted from one to two weeks later than that in the rotations matured with less drying of the forage than the earlier planting.

Maximum temperature 90; minimum 29; precipitation .07 inch.

DICKINSON:

The weather of the week was mild with a light frost on the morning of September 17. This killed some of the tender vegetation but did not damage corn which was still standing.

DICKINSON, continued:

The rest of the Northwestern dent for silage was cut and run into the silo. The ears were of good size and about mature so that the yield was estimated at about 35 bushels an acre.

Late varieties of plums and crabs were picked and the final picking made of ripe tomatoes.

Yields of plums and crabs were the best yet harvested from trees planted in 1921, 1923, and later. Opata plum has again outyielded all other varieties, though several varieties of better quality also yielded well. The maximum yield from a single tree was 96 pounds of Opata from a tree planted in 1923. A Robin crab planted in 1923 yielded 80 pounds of fruit. Considering the age of the tree this was the best yield of either apple or crab.

Mr. R. S. Shotwell, Bureau of Entomology, is spending a few days in the district studying the grasshopper situation.

Maximum temperature 81; minimum 32; precipitation .14 inch.

MANDAN:

Agronomy

The past week has been favorable for field work. All plowing has been completed. The soil was in very good condition for plowing.

Corn varieties were harvested and seed was picked from the breeding block.

No killing frost has occurred to date.

Maximum temperature 82; minimum 35; precipitation .16 inch.

Cooperative Grazing Experiment

The hay in the mowing experiment was cut and hauled during the week. Cutting was delayed later than usual this year. The grass was later in coming to maturity and there was delay because of unfavorable weather.

Cooperative Grazing Experiment
(continued)

The yield of the hay cut each year was 278 pounds per acre, which is about 83 pounds less than the average. The yields from the units cut in two years was 833 pounds per acre, which is about 40 pounds above the average.

Horticulture

All fruit has been harvested in the variety trials and experimental blocks. Plums and crabapples gave very good yields for the most part. Native or Americana varieties of plums gave particularly heavy yields, while the Japanese hybrids were variable, some yielding well and some bearing light crops. Emerald was one of the best of the Japanese hybrid class.

Beta, Suelter, Monitor, Alpha, and Hungarien grapes yielded fairly well where they were covered with soil last winter. Unprotected vines bore a very light crop.

A few more apple and crab selections have been made in the Wealthy seedling block.

Arboriculture

The week has been spent in taking the height measurements of trees in the experimental plantings on the station. This work was finished on September 21. In places, especially where trees are planted in close spacing, there has been considerable killing back of boxelder, and slight injury to ash. Comifer combinations have made an exceptionally good growth this year.

ARDMORE:

The first killing frost of the season occurred on the night of September 20. The temperature fell to 31 degrees and there was a heavy frost, but the damage was confined largely to the more tender garden plants. Corn and alfalfa were not seriously injured.

The winter grains were planted on September 18. The soil on all plots was dry, and the grain could not be planted deep enough to reach moist soil, even on the plots that had been fallowed.

ARDMORE, continued:

Other field work consisted of harvesting late planted sorgo, husking the corn varieties, husking some of the small fields, and harvesting potatoes. The average yield of the two plots of potatoes in the rotations was 134 bushels per acre. The percentage of marketable tubers was high.

The steers from the eighty-acre pasture were moved to the reserve pasture during the fore part of the week. They lost weight during their last period on the eighty-acre pasture.

The weather during the week was seasonably warm, except during one stormy period. The precipitation during the storm period was .17 inch. This was the only rain received during the week.

The precipitation from January 1 to August 31 is 10.90 inches. The average for the same period is 13.35 inches. To date, the precipitation for September is much below the average.

Maximum temperature 92; minimum 31; precipitation .17 inch.

ARCHER:

The weather has continued dry with the nights becoming cooler. During the night of September 20 a light frost occurred but no damage was done at the station. In other localities potatoes, corn and other tender crops were killed.

Work at the station has consisted for the most part in putting up silage. The cement silo was filled with corn and the tile silo is two-thirds full of sumflowers. A few more days, with everything going well, this crop will be harvested and the silo full. A considerable acreage of corn will be left to be used as fodder. At the present time the dairy herd is pasturing on 8 acres of Gehu corn. Other work consisted of harvesting beans and picking seed corn.

Maximum temperature 82; minimum 33; precipitation 0.

AKRON:

Weather remains dry. There has, however, been a break in the rather uniformly high temperatures which have prevailed thus far during September.

AKRON, continued:

A light frost was experienced on Friday morning when the minimum temperature was 31.

Work during the week has been the harvesting of the rotation and the variety beans, the preparing of the rotation winter wheat plots for seeding, the fanning and grading of grain for sale for seed, the seeding of the winter wheat nursery, and the filling of the silo. The taking-off of the corn for the silo is also a step in making ready the ground for the winter wheat variety experiment.

The forage variety experiment on small grain stubble has fired badly and in most instances the varieties on this preparation have not headed. The same varieties on fallow have headed and are holding green but there is now but little hope of maturing even the earliest grain sorghums before a heavy freeze occurs.

Next week efforts will be made to get all the winter wheat seeded, the remainder of the variety beans harvested, the remainder of the silo filled, and the forage varieties on the small grain stubble harvested.

Dr. D. W. Robertson and Mr. G. W. Deming were down from the college on Wednesday and Thursday to oversee the seeding of the winter wheat nursery.

Maximum temperature 89; minimum 31; precipitation Trace.

NORTH PLATTE:

Dry weather continues. Two showers on the 10th and 11th with a total of .50 inch of precipitation have furnished the only moisture supply since July.

Plots are prepared for winter wheat seeding which will be done next week. Late plowed plots broke up very cloddy and it is doubtful whether wheat will germinate on any land except that summer tilled, until more moisture is received.

Corn was harvested on the D. L. A. plots September 12-14. It was quite dry and mature. On account of the heavy July rains, corn yields will be good.

NORTH PLATTE, continued:

Potatoes were dug on the D. L. A. plots September 20. Yields were excellent, ranging from 200 to 300 bushels per acre with but few culls.

COLBY:

Weather remained dry during the week. A very heavy frost occurred on the night of the 20th. The lowest temperature recorded on the station was 32.5 degrees. No damage has been noted on any vegetation here. Reports have come to our attention where local damage was sustained in a few isolated spots.

The rest of the corn varieties and the remaining D. L. A. corn plots were cut during the week. All plot winter wheat and commercial fields of winter wheat were seeded. The wheat seed bed is very hard. The disks, under pressure, on the grain drills penetrated to a depth of 2 to 3 inches on all plots and fields that were summer tilled. The surface soil is dry and on many plots the wheat was seeded into dry soil, while on some it is believed that moisture was close enough to the surface to insure germination. A good stand is not expected unless a gentle rain comes soon.

Milo grain is turning though there are many immature heads. MC- A and B. milo and kafir have dried considerably. Stand is insufficient on any of the listed plots to cause any drying.

Visitors during the week included Messrs. I. K. Landon and C. O. Granfield, of the Kansas Station.

GARDEN CITY:

Fall like temperatures have prevailed during most of the past week. On two nights the temperature lowered to 37. Daily temperatures have been fairly high for this time of the year.

Most of the row crop is maturing and would produce a higher yield if no killing frost were received for two weeks. The sorghum heads are coloring, but there still remain many green ones. The earlier maturing varieties such as feterita and red amber will be ready to harvest the first of the coming week.

GARDEN CITY, continued:

Corn is firing to a certain extent, but seems to be near enough to maturity so that the lack of moisture should not reduce its yield.

Maximum temperature 95; minimum 37; precipitation .16 inch.

DALHART:

The past week has been cold and windy. The nights have been cooling off so rapidly that it seems as though a frost might not be far off. The past few days have been slightly threatening, with a slight shower one evening.

The crops are firing badly, some of them beginning to lodge. The dry weather prevailing over the past month has had its effect on the field crops. While crop prospects are yet considerably above the average, the yield has been cut very noticeably. The earlier dates of planting of milo are showing more effect from the dry weather than any other crop, or method.

Some harvesting has been done this week. Today, September 22, the last dates of broom corn are being seeded and racked. These plots were pulled Friday. The quality of brush is good for the Acme and Scarborough but poor for the Black Spanish. A few grain and forage sorghum plots are ready for harvesting the first of the week. This includes the second dates for some of the forage group. The feed stuff which was planted in the general field was bound and shocked this week.

Cotton is making a fair showing this year. With favorable weather conditions some of the varieties bid fair to make from 1/4 to 1/3 bale to the acre. None is opening yet.

A number of visitors were shown over the station this week. This includes a number of Government officials as well as farmers from various sections of the country. The fore part of the week Messrs. Sieglinger, of Woodward, Oklahoma, Burnham, of Tucumcari, New Mexico, and Jones and Gaines, of Lubbock, visited the station and were shown over the varieties, rotations etc. Mr. Burnham accompanied Messrs. Jones and Gaines as far as Tucumcari, to inspect that station. Mr. Sieglinger was taken on an inspection trip to the Goodwell, Oklahoma, Experiment Station, then on to Guymon, Oklahoma, so he would be able to catch the early morning bus for his return home.

DALHART, continued:

Thursday evening about 5:30 p.m., Messrs. M. A. McCall, and John Martin, of the Cereal Office, visited Dalhart, and were shown over the station that evening, so they could get an early start for the journey ahead. They went from here to Tucumcari.

Maximum temperature 92; minimum 39; precipitation .07 inch.

TUCUMCARI:

Continued lack of rainfall, several hot days, and periods of very high winds have resulted in rapid ripening of crops, extensive firing of crops not mature, and excessive lodging of milo the past week. Corn is being harvested, since much of it is falling although not ripe. Yields will be very low. Several plots of straight neck milo and feterita have been headed and a good proportion of rotation milo plots will be headed next week to avoid lodging. A number of plots are lodging rapidly, although heads are not fully ripe. Kafir is ripening fast, but none is falling.

Work the past week has included plot and increase heading, completion of hauling and stacking cowpeas, bagging broomcorn, some harvesting of forage sorghums, and fencing wheat and rye plots.

An auto trip, early in the week, with Messrs. Carter and Sieglinger, covering about 400 miles, showed that conditions in this area are quite comparable with Tucumcari conditions. The wheat section near Mosquero and Roy is enduring a severe drought, wheat failing the past spring, row crops of practically no value, and the ground too dry to germinate wheat at this time. High areas near the northern border of the State have suffered a severe frost. Conditions near Clayton are similar to those of Tucumcari. While something of a crop will be produced, a rather severe drought has occurred throughout most of the summer. Dalhart, Texas, was favored by abundant rain until the past few weeks and crops in that locality are good. Firing is now occurring, but is not likely to materially reduce yields.

TUCUMCARI, continued:

Official visitors during the week included Messrs. Sieglinger, Carter, Martin and McCall, and Messrs. Jones and Gaines, of the Lubbock, Texas, Sub-station. Messrs. Large, of Chicago, and Pendleton and Stovall, of Dodge City, of the agricultural division of the C. R. I. and P., visited the station Saturday.

Maximum temperature 94; minimum 47; precipitation .05 inch. Wind velocity 5.2 miles per hour.

BIG SPRING:

Dry weather prevailed during the week until the night of September 21, when .41 inch of rain fell. This rain will not help the crops to any extent, except the late planted feed crops and the second cutting of Sudan grass. All of the grain sorghums are about matured and the cotton will not have time to mature any bolls that might form now.

Cotton has been opening very fast during the past week; picking has started over a large part of the county. Many of the early varieties and about half of the plots in the rotations were picked during the week.

All of the kafir in the rotations and a large number of the grain sorghum varieties were harvested during the week. Other work consisted of picking cowpea seed and hauling in cowpea hay.

Maximum temperature 93; minimum 53; precipitation .41 inch.

LAWTON:

Weather conditions remain unchanged. Harvest of feed crops throughout the county is pretty well completed. Dry weather curtailed production of late planted crops on the tight land. Pasture grasses are brown and dry and very short where grazing has been at all heavy. Growth of alfalfa and sweet clover has been at a standstill for several weeks. Small grain farmers have done but little seeding so far on account of dry soil.

LAWTON, continued:

The second picking of cotton was begun on the station September 22. Although it may be necessary to go over the fields the third time there will be extremely little cotton to pick. Many of the bolls have not opened normally and the burrs are knotty and sharp all of which tends to make picking disagreeable.

The wind velocity has been rather spasmodic and averaged a little higher than in previous weeks.

Maximum temperature 95; minimum 53; precipitation 0.

WOODWARD:

This week rounds out a 90-day period of almost complete drought. All sorghum crops are drying up rapidly rather than ripening and are rapidly shedding their leaves. With loss of leaves on rowed crops and practically no growth on sowed feed land and soil so dry that early planting of wheat is impossible, many people will be hard up for feed the coming winter. However, grain yields on sorghums will be remarkably good considering rainfall.

Work of week has consisted of heading sorghums, pulling broomcorn, picking cotton, and harvesting the last of the grapes.

A small exhibit was made for the local fair consisting of sorghum varieties and varieties of grapes and samples of grape juice. The latter makes a showy display bottled, with lights back of it.

Maximum temperature 94; minimum 45; precipitation 0.
Wind velocity 7.6 miles per hour; evaporation 2.315 inches.

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WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

SEP 29 1928

REPORT FOR THE WEEK ENDING SEPTEMBER 29, 1928.

HAVRE:

The first killing frost of the season occurred on the 24th with a temperature of 28. The minimum temperature for the four days following was below freezing, the lowest being 17 on the 27th.

The week has been clear and work has progressed very satisfactorily. The third cutting of hay under irrigation was put up. Corn husking will be completed today. The last cutting of grain hays was made during the week. Beans are yet to be threshed and potatoes and other root crops are yet to be dug.

Combining and threshing has progressed very rapidly in this section of Montana during the week.

Maximum temperature 80; minimum 17; precipitation 0.

JUDITH BASIN:

Clear, cool weather with no precipitation has favored the harvesting of all crops in Central Montana. All the grain on the benchlands has been threshed. Only the late grain on the river bottoms remains unthreshed. Yields of winter wheat were poor, due largely to the Helminthosproium foot-rot disease which attacked early seeded fields. Spring wheat yields are averaging from 18 to 20 bushels per acre. Oats and barley are above average in yield.

Potatoes on the rotations and other experiments were harvested with above average yields. The quality of the crop is good. Fall tillage on the experiments was continued. Duckfooting of cereal and general fallow ground was started. The plowing of old alfalfa experiments which are being discontinued is nearly completed.

Maximum temperature 77; minimum 28; precipitation 0.

HUNTLEY:

Continued clear weather has permitted field work to go forward without interruption during the week. Seeding of fall grains and the harvesting of corn, sunflowers, sorgo and Sudan grass has been completed and bean threshing is under way today. Some miscellaneous work such as taking down pasture fences, burning weeds and picking seed corn has been done between the major jobs.

Maximum temperature 82; minimum 25; precipitation 0.

SHERIDAN:

Threshing was completed the first of the week, with the exception of a field of volunteer flax and a small amount of crested wheat grass and brome. Plots were plowed for winter wheat and all plots prepared for seeding this crop. Fall plowing of plots in the MC series for other crops was completed also.

The ground is quite dry and the tractor disk plow weighted as heavily as possible only scratched the surface in some spots. Precipitation since the 17th of July totals .96 inch, with not enough falling at any one time to more than lay the surface dust for a short period. Thistles were mowed and raked from around the borders of the remainder of the plots to be fall plowed. Potatoes are being dug today.

The week was cooler for the most part than for some time past, but not unseasonably cold, and was mostly fair. The last two days have been quite warm. Threshing is well advanced in this section, although some grain in the shock still remains to be threshed.

Although there have been two killing frosts on the main part of the station, leaves still remain green on Sudan grass on high ground south of the railroad, and a fair crop of seed has ripened.

Maximum temperature 80; minimum 28; precipitation 0.

DICKINSON:

The first general killing frost came on the morning of the 23rd and cool weather lasted until near the close of the week with a minimum of 14 degrees. This freeze was 10 days later than the average killing frost and did little damage since most everything had matured. Emerald and Omaha were the only varieties of plum still immature and the fruit of these was spoiled, but crabs still on the trees were not damaged.

Fall plowing on the rotations was completed September 26. All plots worked up in good shape, due to the rains in August. September has been dry with only .50 inch rain to date.

Cobbler potatoes on rotations 414 and 415 were dug. Yields were 245 bushels on fallow, and 238 on spring plowed wheat stubble. The five-year average for these rotations is 206 bushels after fallow, and 156 bushels on wheat land.

DICKINSON, continued:

About a hundred pounds of ash seed were picked by two boys on Saturday. The yield of this seed is the best ever noted here though this is the first time any quantity of the seed has been picked.

Threshing in the district is about 85 per cent completed. Only a small amount of the crop was harvested by combine. A dealer in Dickinson, who handles one of the most widely distributed lines of farm machinery, sold 76 binders, 1 header and 1 combine. In most other localities a somewhat greater proportion of combines were sold.

Maximum temperature 84; minimum 14; precipitation .14 inch.

MANDAN:

Agronomy

The past week has been cool but favorable for any field work. The first heavy killing frost of the season came on the night of the 22nd. This was followed by four nights of heavy frost with temperatures running from 21 to 28 degrees.

Potatoes in the rotation were dug during the week. The yield was about 175 bushels per acre. The percentage of marketable potatoes was about 95 per cent according to size.

Alfalfa seed was threshed. The yield of clean seed has not been determined, but it will be light.

Winter rye which was seeded on the 12th, was up to a good stand on the 22nd.

Maximum temperature 72; minimum 21; precipitation 0.

Cooperative Grazing Experiment

The cattle were weighed on the 28th. They all show fair to very good gains for September, except the 30-acre bunch, which showed a marked loss.

MANDAN, continued:

Horticulture

Harvesting of beans and late cabbage is being completed in the acre garden. Celery is now ready to be dug and stored in the root cellar. Potatoes were dug on September 26 and 27. Yields were not as good as last year.

Currant cuttings are now being made. Small fruits and grapes are being pruned. Fall growth and stand notes are being taken.

Irrigation of the lawns has been finished for the year.

Visitors of the week included Messrs. A. C. Dillman, Cereal Agronomy Investigations, Washington, D. C., R. L. Shotwell, Bureau of Entomology, Billings, Montana, and O. A. Waetjin, U. S. Indian Service, Fort Yates, North Dakota.

BELLE FOURCHE:

With the exception of the past two days which have been comparatively warm, the weather during the week has been quite cool. The first killing frost of the fall was received the night of September 24 when a minimum temperature of 25 was recorded, and was followed by another heavy freeze two days later when the temperature dropped down to 22.

All crops on the dry land rotation field, except potatoes, had been harvested at the time of the first frost, and only about 30 per cent of the potato vines were still green. Corn had fully matured and was harvested a week before the killing frost was received.

Winter wheat and winter rye seeded September 18 are coming up, and good stands will evidently be secured on all plots. A heavy rain of 1.32 inches precipitation was received four days before the date of seeding and placed the ground in almost perfect condition for the germination of winter wheat and rye.

Aside from harvesting potatoes, husking corn, and weighing corn and sorgo, all regular fall field work has been completed.

Maximum temperature 85; minimum 22; precipitation Trace.

ARDMORE:

The weather during the week was seasonably cool. The first heavy frost came on the 27th killing all growing plants and doing slight damage to potatoes in this vicinity.

The husking of corn in the rotation fields was completed during the week. Yields will not be available until the moisture content has been determined.

The beef cattle used in the summer grazing experiments were weighed on Friday. The animals used on the 80-acre pasture made an average gain per head of 42 pounds during the time they had been on the 320-acre reserve pasture, a period of 14 days. These steers showed a decided preference for the sweet clover over other plants found growing in the reserve pasture. The sweet clover plants had lost most of their leaves but carried a large proportion of seed. The average gains per head made during the 30-day period by the steers remaining in the grazing experiment were as follows:

150 acre pasture.	35 pounds.
80 acre pasture.	18.4 pounds.
320 acre reserve pasture. . . .	26.7 pounds.

Maximum temperature 78; minimum 23; precipitation 0.

ARCHER:

During the week the weather has been dry and rather cool. The first killing frost occurred the night of September 24, when a temperature of 27 degrees was recorded. Such crops as corn, potatoes, beans and squash were frozen. Due to the dry weather, winter wheat is making a very poor stand. The dry condition caused most of the leaves on the trees to dry before the frost occurred.

Work at the station has consisted of threshing and the putting up of silage. All threshing has been finished and the greater part of the silage is up. Considerable corn will be cut and used as fodder. The dairy herd has cleaned up 8 acres of Gehu corn and is ready for another pasture.

Superintendent O. R. Mathews, of Ardmore, South Dakota, was a station visitor September 28.

Maximum temperature 74; minimum 27; precipitation 0.

AKRON:

There has been no break in the drought which has prevailed since July 20. Unless it rains tomorrow, September 1928, will pass into history as the driest since records have been kept at this station. There has been only .04 inch of measurable precipitation during the present September which is only .02 of an inch worse than September 1922. The hard winds experienced during the week ending September 15 have not prevailed since. The temperature curve appears to have permanently broken with prevailing cooler weather the past week. On three different days the minimum was below 32 and the maximum was not above 74.

The pigs were given their regular weighing on Monday. The dry-lot, self-fed averaged 178 pounds while the pasture lot, on self-feeder the past month, only averaged 138 pounds.

The filling of the silo, the harvesting of the variety beans, the making ready and the seeding of the sheep rotation winter wheat and rye fields and the rotation winter wheat and rye plots, and the seeding of the winter wheat variety experiment held attention the whole of the week.

Maximum temperature 74; minimum 28; precipitation Trace.

HAYS:

The weather has been dry with warm days and cool nights, but thus far no frost has occurred in this vicinity, although frost has been reported within a short distance of the station and light ice within fifty miles. For the most part, the sky has been clear and there has been but little wind.

The principal work done on the project during the week is that of seeding wheat which was commenced on Tuesday and finished Friday. Although on some of the plots the seed was sown in dry ground, which is not so encouraging, the weather and ground were almost ideal for a good job of drilling. Other work consisted of soil sampling and heading of kafir on shelterbelts, and spreading of grasshopper poison.

Work on the general fields of the station included harvesting of sorghum crops, both for fodder and for silage, filling of silos, testing of four makes of insilage cutters, and seeding of wheat. The station is using two caterpillar tractors, one drawing two drills, and the other drawing three drills. This equipment covers the ground rapidly.

Maximum temperature 84; minimum 37.

GARDEN CITY:

Continued dry weather is having its effect upon the sorghum crops. Some milo plots are so badly fired that they must be harvested within a few days. Corn is also badly fired. Kafir seems to be the least affected of the crops now standing. The wheat seedbed is so dry that no planting, except the date of planting block, has been done on the project. Some farmers are planting wheat in a dry seedbed.

Some harvesting was accomplished during the week. The first three dates of feterita and all four dates of Red Amber were harvested as were three plots of corn. The yields of these plots will be high. The remaining plots of cowpeas were also harvested for hay. The stand was so poor on the plots, that had to be replanted, that yields are practically failures.

Frost has been reported in surrounding territory, but so far no frost has been recorded at the station.

Maximum temperature 86; minimum 37; precipitation 0.

DALHART:

The past week has been cool during the evenings, nights and mornings, but hot during the day. Brisk winds have prevailed during most days. No rain was recorded during the entire week.

The crops are nearing maturity, some normally and others prematurely. Some places over the station, especially on a few rotations in the west field the west half of the plots is drying up while the east half remains in a normal condition. The portions which have dried up began to lodge and were harvested so as to prevent lodging further. This condition also existed on several plots in the date of planting test.

A number of plots were harvested this week. Not all of them were abnormal. The last half of the week was devoted largely to taking care of the plot portions which were going down. All of the plots which matured normally and were headed have been bound also. By this time next week the variety and date plantings will be thinned out considerably as a number of plots are now ready or will be by the first of the week.

A few varieties of cotton began opening on the 25th and are opening up in fair shape for this early in the season. Not enough of it is out yet to make it worth while to pick.

DALHART, continued:

The later plantings are opening ahead of the early cotton this year.

The seeding of all rotations and continuous cropping plots to wheat and rye was made this week. All the plot work was finished on the 27th and some windbreak planted the 28th.

The last of the grapes were picked this week. The Croton was the latest of all varieties to mature.

A number of visitors from Kansas and Oklahoma were shown over the station at various times during the week. A number of them are interested chiefly in the growing of winter wheat.

Maximum temperature 89; minimum 39; precipitation 0.

TUCUMCARI:

Unusually warm, dry, clear weather characterized the past week, as well as the month. Precipitation was only .12 inch during September, making the total for the past 12 months 11.99 inches. Crops are maturing very rapidly, due partly to the drought, and harvest is in full progress. Lodging is occurring on many plots, necessitating harvest slightly sooner than were this not the case. A good portion of early varieties in the variety grain sorghum test have been harvested, all but late varieties in the forage sorghum block are in the shock, and the majority of corn has been cut. Heading of rotation milo is about one-half done and kafir in rotations will be harvested as soon as possible.

Cotton is well loaded and promises a better yield than normal. The small plants now carry a good load of open bolls and it is probable the yield this season will about double the long-time average of about 100# lint per acre.

Broadcast increase kafir and sorgo should be cut immediately, although the growth is very short. Firing is occurring and growth has ceased.

Cultural practices and rotation effects seem quite pronounced this year and it seems apparent that in spite of very low precipitation, and in some cases because of this, yields will be quite consistent with past records and general recommendations.

TUCUMCARI, continued:

The most striking point noted in the M.C. series is that in every case the fall plowed plot and the fall plowed and sub-soiled plot, plowed last fall when soil was low in moisture, are far inferior to the spring plowed, A, plot. Naturally, crops on fallow are showing up very well this year.

Maximum temperature 95; minimum 46; precipitation 0.
Evaporation 1.673 inches.

BIG SPRING:

Cloudy, damp weather prevailed during the first part of the week. Although the total rainfall for the period was light, there was moisture enough to prevent harvesting of sorghums and picking of cotton. During this time some wheat plots were disked and plot MCA was plowed. The orchard, vineyard, and roadways were seeded to wheat in order to prevent soil blowing next winter.

During the later part of the week a number of grain and forage sorghums varieties, several date of planting sorghums, and the C.C. sumac plots were harvested. During the past two days cotton picking has required the attention of most of the station force.

Mr. McCall and Mr. Martin, of the Cereal Office, were station visitors September 23.

Maximum temperature 91; minimum 50; precipitation.35 inch.

WOODWARD:

The drought which has prevailed over this section of the country since the latter part of June is still unbroken, and weather during the past week has been ideal for the harvesting of sorghums and broomcorn. Very little wheat land over the country has been seeded, but many farmers are becoming impatient waiting for rain, and are planning to "dust" in their wheat, if it doesn't rain soon. No wheat has been seeded at the station to date.

Station work for the week consisted of picking cotton, part of which was picked for the second time, and picking a few apples and Chinese jujubes.

WOODWARD, continued:

Most of the milo plots were harvested, as well as the milo grown in larger field. Broomcorn and many of the variety plots on the Cereal project were harvested. Also, a concrete foundation and base for an out-of-doors feed rack in the horse lot was run.

Messrs. M. A. McCall and John H. Martin, of the Cereal Office at Washington, D. C., visited the station for several days during the week.

Since June 27, 2.58 inches of precipitation have been recorded, occurring in 15 showers, the heaviest of which was .53 inch on July 7.

Maximum temperature 91; minimum 43; precipitation 0.
Evaporation 1.669 inches; wind velocity 5.6 miles per an hour.